

Great Lakes Water Withdrawals: Legal and Policy Issues

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Summary

The Great Lakes and their connecting waters form the largest fresh surface water system on Earth and support substantial social, economic, and ecological interests in the United States and Canada. Because less than 1% of Great Lakes water, on average, is renewed annually, many are concerned with potential threats to lake levels and quality, including environmental and climatic changes, growing consumptive uses of water, and most notably, a growing demand to move Great Lakes water to water-thirsty regions across the United States and throughout the world. Several laws, policies, and governing bodies already regulate the use, withdrawal, and diversion of water from the Great Lakes Basin; however, the concern over domestic and international demand for Great Lakes water has prompted officials from the United States and Canada to reevaluate these laws and policies.

The Council of Great Lakes Governors (CGLG)—a partnership of the governors of the eight Great Lakes states and the Canadian provincial premiers of Ontario and Quebec—was tasked with creating a new common conservation standard to manage water diversions, withdrawals, and consumptive use proposals. On December 13, 2005, the CGLG released (1) the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement and (2) the Great Lakes-St. Lawrence River Basin Water Resources Compact. These water management agreements ban new and increased diversions of water outside the Great Lakes Basin with only limited, highly regulated exceptions, and establish a framework for each state and province to enact laws protecting the Basin. The Compact needs to be approved by each Great Lake state legislature, as well as the U.S. Congress, to achieve full force and effect as an interstate compact. The Canadian federal government and the provinces of Ontario or Quebec are not parties to the Compact; the provinces are, however, signatories to the related international state-provincial Agreement. Currently, all Great Lakes states have enacted legislation approving the Compact. Congress has provided its consent to the Compact, and the President has signed the legislation (P.L. 110-342).

This report describes the characteristics of the Great Lakes, the interests they support, and possible threats to lake levels. It analyzes the federal laws and policies that regulate the diversion, withdrawal, and consumptive use of water from the Great Lakes. Also included is a discussion of the final Compact and Agreement and some of the issues raised by various interest groups. This report concludes with a general discussion on the relationship between compacts, federal law, and the Congress.

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Introduction

The Great Lakes Basin is the world's largest system of fresh water, and the lakes themselves store nearly one-fifth of the world's surface freshwater. Because less than 1% of Great Lakes' water, on average, is renewed annually, many are concerned with potential threats to their water levels and quality, including environmental and climatic changes, and most particularly, an increase in the overall demand for the withdrawal of Great Lakes water. A *withdrawal* means the taking of water from surface or groundwater by any means. A withdrawal that transfers water from the Great Lakes Basin into another watershed, or from the watershed of one of the Great Lakes into that of another is generally called a *diversion*.¹ When the withdrawn water is lost or otherwise not returned to the Great Lakes Basin due to evaporation, incorporation into products, or other processes, a *consumptive use* has occurred. While the effects of such activities on the Great Lakes—individually and cumulatively—are not completely understood, lower lake levels could cause significant environmental, social, and economic harms.

Some observers assert that the pressure to divert Great Lakes water to regions across the United States and throughout the world is growing. Communities are looking to the Great Lakes as a feasible water supply, because of concerns with population growth, persistent drought, and contaminated or exhausted well water. Some view the communities lying just outside the Great Lakes Basin as presenting the largest demand for Great Lakes water in the near future, though the possibility of exporting water under trade agreements also has raised concern. These potential threats have prompted a reevaluation of the frameworks that regulate the use, withdrawal, and diversion of water from the Great Lakes Basin, and for some, a call for a new Basin-wide water conservation standard.

On July 19, 2004, the Council of Great Lakes Governors (CGLG)—a non-partisan partnership of the governors of the eight Great Lakes states and the Canadian provincial premiers of Ontario and Quebec—announced the completion of a draft Compact and Agreement to regulate water withdrawals and diversions from the Great Lakes Basin. After reviewing more than 10,000 public comments, the CGLG released revised drafts of the Compact and Agreement on June 30, 2005. Third and final versions were released and approved by the governors and premiers on December 13, 2005.

The regulation of Great Lakes water has always been of interest to Congress. These proposals could potentially affect the environment and the economies of, and relationship between, Canada and the United States. The Compact has been finalized and ratified by each state legislature signed as a party to the Compact. The U.S. Congress has also approved the Compact, allowing it to achieve full force and effect as an interstate compact. The Canadian federal government and the provinces of Ontario or Quebec are not parties to the Compact; the provinces are, however, signatories to the related international state-provincial Agreement, which is non-binding.

This report begins with a description of the characteristics of the Great Lakes, the interests they support, and the possible threats to lake levels. It then analyzes current laws and policies that regulate the withdrawal of water from the Great Lakes. Next, this report discusses the proposals and presents summaries of various stakeholder views. This report concludes with a general discussion on the relationship between compacts, federal law, and the Congress.

¹ For purposes of the Compact (see later discussion in text), a diversion does not apply to water that is used in the Basin or a Great Lake watershed to manufacture or produce a *product* (e.g., agricultural products) that is then transferred out of the Basin or watershed.

Characteristics of the Great Lakes

The Great Lakes Basin

The Great Lakes Basin is shared by eight states (Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin) and two Canadian provinces (Ontario and Quebec). The Basin comprises the Great Lakes, connecting channels, tributaries, and groundwater that drain through the area up to the Trois Rivières, Québec. (See **Figure 1**.) The Great Lakes watershed is the largest system of fresh, surface water in the world and covers approximately 300,000 square miles. The Great Lakes themselves contain an estimated 5,500 cubic miles or six quadrillion gallons of water. This constitutes nearly 90% of the surface freshwater supplies of the United States and 20% of the surface freshwater supplies of the world.² Since the Great Lakes cover a wide area, physical characteristics such as topography, soils, and climate also vary considerably.

Water Levels and Flows

The water levels of the Great Lakes are affected by a number of factors, including precipitation, evaporation, groundwater, surface water runoff, diversions into and out of the system and regulation. Some of these factors are controlled by the seasons, which can bring varying levels of precipitation and runoff to the lakes. For example, levels are high in the spring and summer, when runoff is high and rapid but low in the winter, when little or no runoff occurs. As a system, the Great Lakes annually lose approximately 1% of their water through natural outflows (i.e., via the St. Lawrence River).³ Rates of water retention in the Great Lakes vary widely among lakes. Water that enters Lake Superior, for instance, takes approximately 182 years to be flushed through the lake. By contrast, Lake Erie and Lake Ontario take approximately three and six years, respectively, to flush water through.

² Great Lakes Commission, The Great Lakes Information Network, *The Great Lakes, Overview*, available at <http://www.great-lakes.net/lakes/#overview>, last visited on September 2, 2008.

³ U.S. Environmental Protection Agency, *The Great Lakes. An Environmental Atlas and Resource Book* (Chicago, IL: 2002), p. 3. [hereinafter Great Lakes Atlas].

Figure I. The Great Lakes Basin



Source: Council of Great Lakes Governors (2008).

Outflows from the Great Lakes are relatively small compared to the lakes' volume. The largest outflow, through the St. Lawrence River, has been recorded at an average of approximately 244 thousand cubic feet per second (cfs).⁴ Other outflows include evaporation and artificial diversions. Currently, more water is diverted into the Great Lakes Basin than out of it. There are eight major interbasin diversions in the lakes; four take water out of the lakes. The largest, the Chicago diversion, diverts water from Lake Michigan to the Mississippi River Basin for water supply, sewage disposal, and navigation. The Chicago Diversion removes an average of 3,200 cfs from Lake Michigan and operates under Supreme Court Decree.⁵ **Table 1** shows the current major diversions of water in and out of the Great Lakes allowed under law.

⁴ Great Lakes Commission, The Great Lakes Information Network, Great Lakes—St. Lawrence Water Flows, Overview, last visited on September 2, 2008, at <http://www.great-lakes.net/envt/water/levels/flows.html>.

⁵ During the mid-1800s, the City of Chicago reversed the flow of the Chicago River so that instead of flowing into Lake Michigan, it flowed out of Lake Michigan toward the Mississippi River system. This required the diversion of water from Lake Michigan. After years of lawsuits and negotiations among the Great Lakes States, the United States, and the City of Chicago, a Consent Decree was entered into in 1967 regulating the diversion of Great Lakes water into the Chicago River (approx. 3,200 cfs). See *Wisconsin v. Illinois*, 388 U.S. 426 (1967), amended by 449 U.S. 48 (1980). The Army Corps of Engineers, however, estimated that 3,439 cfs was actually being diverted. The State of Illinois, through a 1996 Memorandum of Understanding, has agreed to repay the total water deficit by the year 2019.

Table 1. Great Lakes Interbasin Diversions
(as of February 2000)

Existing Diversions in the Great Lakes Basin	Operational Date	Direction (in or out of the Basin)	Lake	Average Annual Flow in cfs
Forestport	1825	out	Ontario	50
Ohio & Erie Canal	1847	in	Erie	12
Chicago	1848	out	Michigan	3,200
Portage Canal	1860	in	Michigan	40
Long Lac	1939	in	Superior	1,590
Ogoki	1943	in	Superior	3,990
Pleasant Prairie	1990	out	Michigan	5
Akron	1998	out and in	Erie	7.5

Source: Council of Great Lakes Governors, Current Great Lakes Basin Diversions, available at http://www.cglg.org/projects/water/CompactEducation/Current_Great_Lakes_Basin_Diversions_5-15-06.pdf.

Water Uses

The Great Lakes play a vital role in the daily lives of millions of people and the economies of two nations. The Great Lakes Basin is home to more than one-tenth of the population of the United States and one-quarter of the population of Canada. The estimated 45 million people in the Basin rely on the Great Lakes for jobs, energy, shipping, drinking water, and recreation, among other things. For example, in 1995, nearly 11% of the total employment and 15% of the manufacturing employment for the United States and Canada were sustained by the Great Lakes.⁶ Further, the tourism and fishing industries in the Great Lakes are estimated to be worth about \$4 billion each, and navigation through the Great Lakes is responsible for more than 180 million tons of shipping annually. The Great Lakes Basin also generated approximately 15% of the U.S. Gross Domestic Product for 2006.⁷

Ninety percent of the water withdrawals from the Great Lakes Basin are from the lakes themselves, with the remaining 10% coming from tributaries and groundwater sources. Water is withdrawn from the Great Lakes to support a number of purposes, including municipal needs, irrigation, industries, power plants, and livestock. Several studies conducted during the mid-1990s estimated that from 55 to 57 billion gallons per day (85-88 cfs) of water is withdrawn (includes diversions) from the Great Lakes.⁸ Most of the water withdrawn, however, returns to the

⁶ David R. Allardice and Steve Thorp, *A Changing Great Lakes Economy: Economic and Environmental Linkages*, State of the Lakes Ecosystem Conference, Environment Canada and U.S. Environmental Protection Agency, EPA 905-R-95-017 (Dearborn, MI: August 1995).

⁷ U.S. Bureau of Economic Analysis, U.S. Department of Commerce. See <http://www.bea.gov/regional/gsp/> for calculations.

⁸ International Joint Commission, *Protection of the Waters of the Great Lakes*, Final Report of the Governments of Canada and the United States, at 8, Table 1 (February 22, 2000) (citing studies by the Great Lakes Commission and the U.S. Geological Survey) [hereinafter IJC 2000 Report].

Basin. Only a small percentage—roughly 5%—is actually consumed (e.g., evaporation, incorporated into products or crops) from the Great Lakes and therefore lost from the Basin.⁹

The percentage of water consumed varies with the type of use. For example, approximately 95% of the water withdrawn from the Great Lakes is for hydroelectric power (e.g., driving turbines and cooling reactors); however, less than 1% of that water is consumed.¹⁰ Public water supply followed by industrial use and irrigation are the highest consumptive uses in the Great Lakes Basin.¹¹ Reports indicate that 33% of the total consumptive use of water from the Basin is in Canada and 67% is in the United States, with per capita consumptive use approximately equal.¹²

There is a general consensus that total water withdrawal and consumptive use in the Great Lakes will increase, but it is unclear by how much. Furthermore, there is no agreement on the amount of water that will be consumed and thus, ultimately lost from the Great Lakes. One study shows consumptive use falling 2-3% by 2020 in the U.S. section; another projects consumptive use in the entire Basin rising 3% by 2020; and yet, a third study predicts a rise in consumptive use by 25% as a whole in the Basin by 2020.¹³ These uncertainties and others have made water management for the future difficult, but have precipitated the call for better record keeping and more studies.

Potential Threats to Water Levels

Potential changes in water levels may come from existing and new diversions; climatic variations;¹⁴ geologic processes;¹⁵ variations in precipitation, evaporation, and runoff; population growth; and changes in land use (i.e., farm to urban). Yet, many contend the greatest threat to water levels in the Great Lakes would be through excessive consumptive withdrawals without accompanying conservation.¹⁶ Such withdrawals may come as a result of growing domestic and international demand for Great Lakes water.

According to most studies, proposals to withdraw Great Lakes water are most likely to come from growing communities straddling the boundary of or just outside the Great Lakes Basin. The demand for Great Lakes water from these communities is thought likely to increase due to population growth, climatic changes (e.g., persistent drought), and contaminated or exhausted water supplies. For example, the communities of Pleasant Prairie, WI, and Akron, OH, were the first two Basin-neighboring communities to receive permission under U.S. law (see later

⁹ IJC 2000 Report, at 9.

¹⁰ IJC 2000 Report, at 10. *See also* Great Lakes Commission, *Toward a Water Resources Management Decision Support System for the Great Lakes—St. Lawrence River Basin* (May 2003), Ch. 3 at 56 (referencing 1998 statistics) [hereinafter *Toward a Water Resources Management Decision Support System*].

¹¹ *Toward a Water Resources Management Decision Support System*, Ch. 3 at 61 (referencing 1998 statistics).

¹² IJC 2000 Report, at 8.

¹³ *Id.* at 10 (citing studies provided by the U.S. Geological Survey, the U.S. Forest Service and private consultants).

¹⁴ Studies show that the Great Lakes are highly sensitive to climatic variability. *See* IJC 2000 Report, at 20-21; S. A. Changnon, *Temporal Behavior of Levels of the Great Lakes and Climate Variability*, *Journal of Great Lakes Research*, v. 30, no. 1, at 184-200 (2004).

¹⁵ A significant cause of descending water levels in the lakes Michigan and Huron may be river bottom erosion in the St. Clair River, according to a recent study. Some attribute dredging as the cause of erosion, whereas others argue the cause is rooted in geological changes and increased water in some of the lakes. *See* W.F. Baird & Associates, *Man Made Intervention and Erosion in the St. Clair River and Impacts on the Lake Michigan—Huron Lake Levels* (Ontario, CA: January 2005).

¹⁶ For a summary opinion, see Allegra Cangelosi, *Sustainable Use of Great Lakes Water: The Diversion Threat's Silver-Lining?* Northeast Midwest Institute (Washington, DC: April 2001).

discussion) to divert water from the Great Lakes. The City of Waukesha, WI, another Basin-neighboring community, is seeking 20 million gallons of Lake Michigan water per day.¹⁷ Others speculate that the Great Lakes are only a few years away from serious proposals to divert water to areas in southwest and southeast United States.¹⁸

Some are also concerned with the idea of exporting Great Lakes water in bulk to water-thirsty areas around the world that are similarly suffering from poor water quality and exhausted water supplies. While most believe that the prospect of exporting Great Lakes water in bulk by tanker or other means has largely vanished in recent years because of public outcry, political reaction, and high cost,¹⁹ some are becoming increasingly alarmed due to the development of free trade agreements. Since the extent to which water can be traded and protected under such trade agreements remains unresolved, many fear that Great Lakes water could be traded like any other commodity (see later discussion). Indeed, the export of water appears to be becoming more common in other parts of the world.²⁰ Some international organizations, including the World Bank, recognize water as a basic “human need”—a categorization that some view will facilitate the trading and supplying of water on a for-profit basis by corporate interests.²¹

Potential Impacts of Low Water Levels

Variations in water levels can have potentially significant socio-economic and environmental consequences. Lower water levels can reduce hydroelectric power generation and increase costs to commercial shipping. The Great Lakes-St. Lawrence shipping corridor, which is more than 2,300 miles in length, would need more dredging to maintain current levels of navigation if water levels decrease. Dredging may also be necessary for local areas where recreational boats are used.²² Apart from being costly, dredging can affect water quality by resuspending contaminated sediments within the lakes. Lower water levels could also affect water quality by limiting the ability of the lakes to flush out toxic substances and excessive levels of nutrients, such as phosphorous and nitrogen. Coastal wetlands can dry up if water levels significantly recede along the shoreline and wetland habitat may be replaced by forested lands or dunes. Receding shorelines could also create problems in accessing marinas and necessitate change in other infrastructure (e.g., extend water intake pipes) to maintain recreational and other activities. Some contend that changes in scenic areas and the environment would lower tourism and recreation.²³

¹⁷ Dan Egan, JSOnline, *Group says Great Lakes water agreement leaves Canada high and dry* (October 22, 2004) available at <http://www.jsonline.com/story/index.aspx?id=268959>, last visited on September 2, 2008 [hereinafter Egan, *Canada High and Dry*].

¹⁸ Krestia DeGeorge, *Water Watch: Striving to Keep the Great Lakes Ours*, Rochester-Citynews.com (July 28, 2004) available at <http://www.rochestercitynewspaper.com/archives/2004/7/Water+watch:+striving+to+keep+the+Great+Lakes+ours>, last visited on September 2, 2008.

¹⁹ See, e.g., IJC 2000 Report, at 13; International Joint Commission, *Protection of the Waters of the Great Lakes, Three Year Review*, at 57 (2002).

²⁰ For example, in Turkey, pipelines, as well as converted oil tankers, will be used to transfer water from the Manavgat River to markets in Cyprus, Malta, Libya, Israel, Greece, and Egypt. In the United Kingdom, private companies are using polyurethane bags towed by tugboats to transport water to Greece. See MAUDE BARLOW & TONY CLARKE, *BLUE GOLD*, Ch. 6 (The New York Press 2002).

²¹ *Id.* at Ch. 4, p. 80. If water were defined as a “human right,” it is argued, then it would be the responsibility of governments to ensure that all people would have equal access on a nonprofit basis to water.

²² R.C. Schwartz, et al., *Modeling the Impacts of Water Level Changes on a Great Lakes Community*, Journal of the American Water Resources Association, at 647-662 (June 2004).

²³ U.S. Global Change Research Program, *Preparing for a Changing Climate, The Potential Consequences of Climate Variability and Change*, The Great Lakes (Ann Arbor, MI: October 2000).

Lower water levels may have some positive impacts, such as lowering the potential for flooding and increasing the area of beaches in some regions of the Basin.²⁴

Most experts believe that there is still much to be learned regarding the effects of water withdrawals, climate change, and consumptive uses on the Great Lakes. Moreover, trying to determine the individual impact of a single factor may be difficult to quantify, since one or more may have no measurable impact or may be subject to various interpretations. Accordingly, many have become concerned with the cumulative effects of these factors on the Great Lakes. The lack of certainty in predicting future water levels, in conjunction with the cumulative impact that many of the above factors may have on lake levels, has made many to regard a “precautionary approach” as the most appropriate standard for considering water withdrawals.²⁵

Legal and Policy Frameworks

The withdrawal of water from the Great Lakes has concerned the United States and Canada since the 1800s. Because the Great Lakes Basin borders two countries, several states and provinces, and various tribal territories, lawmakers have generally pursued multi-jurisdictional, regional, and cooperative approaches for the protection of the lakes. Accordingly, the withdrawal of Great Lakes water is governed by a number of federal, state, and provincial laws, international agreements, and tribal water rights. The following analysis focuses on the U.S. federal laws and policies that regulate the withdrawal of water from the Great Lakes, as well as the institutional bodies that play a role in overseeing such regulation.

The Early Years

An early attempt to resolve boundary water disputes between the United States and Canada resulted in the creation of the Boundary Waters Treaty of 1909 (BWT) and the formation of the International Joint Commission (IJC)—a representative body of U.S. and Canadian officials established to resolve situations unique to boundary waters. The BWT defines *boundary waters* as those lakes and rivers along the international boundary between the United States and Canada, “but *not* including tributary waters which in their natural channels would flow into such lakes, rivers, and waterways” (emphasis added).²⁶

Among other things, the BWT prohibits diversions of boundary waters on one side of the boundary that affect the natural level or flow of boundary waters on the other side without the approval of one of the two nations and the IJC. Article II reserves to each nation the right to divert and control tributaries of boundary waters and transboundary rivers, although the other party would continue to have the right to seek legal remedies for any resulting injury. Article VIII sets priorities that the IJC must consider when contemplating new water diversions (post-1909). The order of preference is (1) uses for domestic and sanitary purposes; (2) uses for navigation, including the service of canals for the purposes of navigation; and (3) uses for power and for irrigation purposes. Under Article VIII, no use may be permitted that tends to materially conflict with any use which is given preference over it.

²⁴ *Id.*

²⁵ IJC 2000 Report, at 18.

²⁶ The specific exclusion of tributary waters from the Treaty could be significant. For example, Lake Michigan—being wholly inside the United States—does not appear to be a part of the boundary waters under this definition, but rather would be considered tributary waters. Article II of the Treaty, nonetheless, appears to allow the other party to have the right to seek legal remedies for any resulting injury from the diversion of tributary waters.

During the 1950s, many diversion proposals surfaced to move water out of the Great Lakes Basin. Such proposals included a coal-slurry pipeline linking Lake Superior with Wyoming, a proposed canal linking the Great Lakes with the Mississippi River, and a Grand Canal project connecting the Hudson Bay and the western United States through the Great Lakes.²⁷ In part to address these proposals, the Great Lakes states devised a regional plan—the Great Lakes Basin Compact (GLBC)—to promote the comprehensive development, use, and conservation of the Great Lakes Basin. The GLBC established a U.S. intergovernmental agency known as the Great Lakes Commission (GLC) to carry out its provisions. The GLBC, as originally conceived by the states, included the provinces of Quebec and Ontario as signatories. When the GLBC came to Congress for approval (see later discussion), however, Congress did not consent to the inclusion of the provinces largely because it determined that the matter was of national interest and would interfere with the Executive’s plenary authority to negotiate the nation’s foreign policies.²⁸ Accordingly, the GLC consists of delegates from the Great Lakes states, but allows the provinces of Ontario and Quebec to participate as nonvoting associate members. The GLC has supported a number of water management studies and initiatives.

In 1985, the Great Lakes states and the provinces of Ontario and Quebec completed the Great Lakes Charter, a protocol in which the signatories agreed not to make any new diversion or consumptive use of Great Lakes waters averaging more than five million gallons per day over a thirty-day period (about 1.8 billion gallons annually) without the notification, consultation, and approval of all parties to the Charter. Unlike the BWT, which did not strictly address environmental issues and was limited to boundary waters, the Charter clearly defined environmental protections and pertains to the entire Great Lakes Basin, including tributaries. The Great Lakes Charter, however, is not legally binding and represents “a kind of gentlemen’s agreement between the Governors of the Great Lakes States and the Provinces of Ontario and Quebec.”²⁹

Congressional Involvement

Congress endorsed some of the prohibitive concepts from the Great Lakes Charter by including a section in the Water Resources Development Act of 1986 (WRDA 1986) that prohibits the diversion of water outside the Great Lakes Basin unless such diversion is approved by the governors of all Great Lakes states.³⁰ Still, the prohibitions in WRDA 1986, as well as the Charter, lacked mechanisms to legally bind Canada and to address the growing concern over the possibility of trading Great Lakes water internationally. This issue came to the forefront in 1998 when the Ontario government granted a permit to the Canadian-based Nova Group to ship up to 600 million liters (159 million gallons) of water annually for five years from Lake Superior to Asia. This amount of water was insufficient to trigger the consultation and approval process of the Charter, but it did prompt lawmakers to reexamine existing Great Lakes water management principles and conservation measures.

²⁷ James P. Hill, *Great Lakes Commentary: The New Politics of Great Lakes Water Diversion: A Canada-Michigan Interface*, 1999 TOL. J. GREAT LAKES’ L. SCI. & POL’Y 75, 77 n. 11 (1999).

²⁸ *The Great Lakes Basin: Hearing on S. 2688 Before the Senate Comm. on Foreign Relations*, 84th Cong. at 83-87 (1956) (statement of Gilbert R. Johnson, Counsel, Lake Carriers Assoc., Cleveland, OH). Congress provided its conditional consent to the Compact in 1968 in P.L. 90-419.

²⁹ *Little Travers Bay Bands of Odawa Indians v. Great Spring Waters of America, Inc.*, 203 F. Supp. 2d 853, 857 (W. D. Mich. 2002).

³⁰ P.L. 99-662, §1109 (codified as amended at 42 U.S.C. §1962d-20).

In response, one of the first steps the United States and Canada took to address concerns about removals of water from the Great Lakes was to request the IJC to examine and report on the consumption, diversion, and withdrawal of waters from the Great Lakes Basin, as well as on the current laws and policies that affect the sustainability of the water resources in the Basin. In its report, the IJC recommended that the United States and Canada notify each other of any proposals for major new or increased consumptive uses of water and that they develop and strengthen the standards set forth in the Great Lakes Charter.³¹

The Canadian diversion proposal also sparked active dialogue in the 105th and 106th Congresses. Initially, in October 1998, the House passed H.Res. 566, which called on the President and the Senate to work to prevent the sale or diversion of Great Lakes water in mass quantities until procedures were established that would guarantee that any such sale was approved by the United States and Canada. During the 106th Congress, several bills were introduced that would have required moratoria on water exports from the Great Lakes for certain periods of time, pending further studies and the development of standards for diversions.³² Although these measures were not enacted, new restrictive language was included and enacted in the Water Resources Development Act of 2000 (WRDA 2000).³³

Section 504 of WRDA 2000 expanded the prohibition on diversions (from WRDA 1986) to expressly mandate that the *export* of Great Lakes water from the Great Lakes Basin could not occur without unanimous approval of all eight governors of the Great Lakes states.³⁴ This language applies domestically and does not bind Canada. WRDA 2000 also encouraged the Great Lakes states, in consultation with Ontario and Quebec, to develop and implement a *common conservation standard* for making decisions concerning the withdrawal and use of water from the Great Lakes Basin.

Recent Events

In response to WRDA 2000, the Great Lakes governors and premiers of Ontario and Quebec signed the Great Lakes Charter Annex of 2001—a supplementary agreement to the Great Lakes Charter committing the governors and premiers to develop and implement a new, common, resource-based conservation standard for future water withdrawal proposals from the Great Lakes Basin.³⁵ The Annex also formalized the governors' and premiers' commitment to create a binding basin-wide framework. On July 19, 2004, the CGLG released two draft water management proposals to implement the 2001 Annex: (1) the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement and (2) the Great Lakes-St. Lawrence River Basin Water Resources Compact. After receiving more than 10,000 public comments on these drafts, the CGLG released revised drafts on June 30, 2005. Third and final versions of the Agreement and Compact were released and approved by the governors and premiers on December 13, 2005. Some provisions of the Agreement went into effect immediately, and other portions are being phased in over time. The Compact also needs to be approved by each state legislature, as well as

³¹ IJC 2000 Report, at 44.

³² See S. 1667, H.R. 2973, and H.R. 2595, 106th Cong. (1999).

³³ P.L. 106-541 (codified at 42 U.S.C. §1962d-20).

³⁴ *Id.* at §504 (codified at 42 U.S.C. §1962d-20(b)(2)).

³⁵ Also in 2001, Canada passed amendments to its International Boundary Water Treaty Act that prohibit any person from using or diverting boundary waters out of the basin and “deem” any such removal, given the cumulative effect of such removals, to affect the natural level or flow of the boundary waters on the other side of the international boundary (*An Act to amend the International Boundary Waters Treaty Act*, R.S. ch. 40 (2001) (Can.)).

Congress, to achieve full force and effect as an interstate compact. Currently, all eight states have enacted legislation approving the Compact.³⁶ Both the House and Senate passed proposed legislation approving the Compact, and the President signed the Compact into law in October 2008.³⁷

The Great Lakes-St. Lawrence River Basin Proposals

There are two proposals relating to the Great Lakes-St. Lawrence River Basin—the Great Lakes-St. Lawrence River Basin Water Resources Compact (the Compact) and the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement (the Agreement). The Compact would be a binding agreement among the Great Lakes states to implement a conservation standard for regulating water withdrawals from the Great Lakes Basin. The Agreement, on the other hand, is a non-binding agreement among the eight Great Lakes states and the provinces of Ontario and Quebec. The Agreement contains the commitment of the Great Lakes states and provinces to implement a standard for regulating water withdrawals and diversions from the Great Lakes Basin. The Compact and Agreement share many similar features and refer to each other for notice, consultation, and review purposes. The following paragraphs discuss each in more detail.

The Great Lakes-St. Lawrence River Basin Water Resources Compact

The Compact contains nine articles and establishes a Great Lakes Basin Water Resources Council, consisting of the Governors of the Signatory Parties (i.e., the Great Lakes States). The Council, among other things, would review certain water withdrawal, diversion, and consumptive use proposals based on criteria presented in the Compact's *Exception Standard* and *Decision-Making Standard*. These standards are composed of a number of legal and environmental water management requirements (see **Appendix**) and are collectively called the *Standard of Review and Decision* [hereinafter "Standard" unless otherwise stated]. The Standard sets only a minimum level of protection; parties may impose a more restrictive decision-making standard for withdrawals under their authority.

Under the Compact, it is the duty of each Great Lakes state to manage and regulate new or increased withdrawals, consumptive uses, and diversions. The Compact basically separates its regulatory framework into two categories: (1) new or increased water withdrawals and consumptive uses and (2) diversions. Any person who intends to *withdraw* 100,000 gallons-per-day (gpd) or greater average in any 30-day period or *divert* any amount of water is required to register the withdrawal or diversion with the originating state. The Compact prohibits all new or increased *diversions* from the Great Lakes unless the proposed diversion is an *intra-Basin transfer*³⁸ or moves water to one of the following locations:

- *Straddling Communities*: means any incorporated city, town or the equivalent thereof, wholly within any county that lies partly or completely within the Basin, whose corporate boundary existing as of the effective date of this Compact is partly within the Basin or partly within two Great Lakes watersheds;

³⁶ See <http://www.cglg.org/projects/water/CompactImplementation.asp>, last visited on July 10, 2008.

³⁷ P.L. 110-342.

³⁸ An *intra-Basin transfer* means the transfer of water from the watershed of one of the Great Lakes into the watershed of another Great Lake.

- *Communities within a Straddling County*: means any incorporated city, town or the equivalent thereof, that is located outside the Basin but wholly within a county that lies partly within the Basin and that is not a straddling community.

In addition to meeting the criteria listed in the Exception Standard in certain circumstances,³⁹ each of the above categories has more precise qualifications and requirements. For example, a *straddling community* that intends to transfer water must ensure that the water is (1) used solely for public water supply purposes within the straddling community and (2) returned (with limited exceptions), either naturally or after use, to the source watershed. A proposal to transfer water to a community within a *straddling county* must demonstrate that there is no reasonable water supply alternative within the Basin in which the community is located and that the proposal will not endanger the integrity of the Basin's ecosystem. *Straddling county* proposals and some *intra-basin transfer* proposals must be approved by all members of the Council.

With respect to the regulation of new or increased withdrawals and consumptive uses, each state will have the flexibility to determine threshold levels based on volume, location, the nature of use, and other factors. If a party does not establish its own review threshold within 10 years of the effective date of the Compact, it would be required to manage and regulate all new or increased withdrawal proposals of 100,000 gpd or greater average in any 90-day period. For consumptive use proposals of 5 million gpd or greater, the originating state must provide all other states and the provinces a period of 90 days to comment on the proposal. Proposals for new or increased withdrawals and consumptive use must meet the Decision-Making Standard.⁴⁰

For some water withdrawal proposals, *regional review* is required under the Compact. Regional review means the collective review by the Agreement's Regional Body—members of the Council and the premiers of Ontario and Quebec (see below). Pursuant to the Compact, the following water transfers require regional review:

- diversions to straddling communities that result in a new or increased consumptive use of 5 million gpd or greater;
- intra-basin diversions that result in a new or increased consumptive use of 5 million gpd or greater; and
- diversions to a straddling county.

Proposals for exceptions subject to regional review must be submitted by the originating party, and where applicable, to the Council for concurrent review. Regional review is to be completed within 90 days after receiving notice of the proposal. Although regional review would involve the Canadian provinces in the oversight of these three types of proposals, the Compact does not require actual approval by the Regional Body (see "Agreement" discussion). Thus, the Canadian provinces could not technically prevent these types of diversions from occurring under the Compact, though the regional review process may provide some limitations.⁴¹ A majority of the Regional Body may also request review of a "regionally significant or potentially precedent

³⁹ See, e.g., §4.9 of the Compact (requiring only new or increased withdrawals of 100,000 gpd or greater in straddling communities to meet the Exception Standard).

⁴⁰ The Compact also allows new or increased withdrawals, consumptive uses, and diversions of Basin water within the State of Illinois pursuant to the Supreme Court decree in *Wisconsin v. Illinois*, 388 U.S. 426 (1967), amended by 449 U.S. 48 (1980), but requires the State to seek formal input from Ontario and Quebec if it wishes to modify the decree.

⁴¹ In some cases, a withdrawal proposal cannot be approved by the originating party if it is inconsistent with its applicable Standard. Thus, in practice, the findings of the Regional Body may significantly affect the progress of a withdrawal proposal.

setting proposal.”⁴² Moreover, the Compact states that it is the parties’ intention to submit proposals to the Regional Body for review, which might include more than those required.

The Compact calls on the signatory states to develop and implement water conservation and efficiency programs that collectively will ensure improvement of the waters and water dependent natural resources of the Basin; protect the integrity of the Basin ecosystem; and retain and restore the quantity of surface water and groundwater in the Basin. Within two years of the enactment of the Compact, each Party is required to develop its own water conservation and efficiency goals and objectives that are consistent with basin-wide objectives. Each Party is also expected to develop and implement a water conservation and efficiency program that can be either mandatory or voluntary.⁴³ Even though programs are required to reflect basin-wide objectives, some might question why they are non-binding. One potential reason would be to allow Parties flexibility to create programs that match their needs and geography.

Every five years, the Council, in cooperation with the Provinces, will review and modify basin-wide objectives based on new technologies, new patterns of water use, changing demands and threats, and a Cumulative Impact assessment (see below for a description).⁴⁴

The Compact requires the Great Lakes states, in cooperation with the provinces, to conduct a periodic assessment of the cumulative impacts of withdrawals, diversions, and consumptive uses. The assessment is to be conducted every five years or each time the incremental Basin water losses reach an average of 50 million gallons per day over any 90-day period in excess of the quantity at the time of the most recent assessment, whichever comes first. The assessment is expected to form the basis for reviewing the Standard of Review and Decision, and the regulations implemented by the Council and Parties. The assessment will use “current and appropriate guidelines for conducting such a review,” consider the effects of climate change and other significant threats to Basin waters, and consider adaptive management principles and approaches.⁴⁵ The “appropriate and current guidelines” for conducting the assessment are not defined in the Compact, and is unclear if they are expected to be consistent among Parties.

The Compact also establishes procedures whereby the public and tribes may comment on the proposals. Nothing in the Compact is intended to affect the application of the Boundary Waters Treaty of 1909.

The Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement

The final Agreement is broken-up into seven chapters and basically mirrors the requirements, threshold levels, and Standards described in the Compact. Under the Agreement, review of a proposal to determine its consistency with the Standard will be conducted by a state-provincial *Regional Body*. Regional review under the Agreement is required for the same three types of proposals that require Regional review in the final Compact. Instead of a voting process, the Agreement requires that the Regional Body declare whether a proposal is consistent with the Standard through a public “Declaration of Finding.” In the event that some of the members of the Regional Body do not believe the proposal is consistent with the Standard, the “Declaration of Finding” is to present the different points of view and indicate each party’s position. The state or

⁴² Compact, at §4.5.1(f).

⁴³ Compact, at §4.2.2.

⁴⁴ Compact, at §4.2.3.

⁴⁵ Compact, at §4.15.1.

province where a proposal originates must consider the “Declaration of Finding” before it makes a decision on the proposal. The Agreement is intended to be non-binding, yet serve as a guiding document for water management and withdrawal procedures.

Issues

Each version of the Compact and Agreement generated much debate. Earlier versions received thousands of comments from the public, some of which applauded the efforts made by the CGLG and others which called for change. The third and final versions attempt to address many of these concerns. This section categorizes some of the issues raised in trade, industrial, environmental, and legal perspectives. Several of the arguments discussed herein addressed earlier drafts but still appear applicable.

Trade⁴⁶

The extent to which water can be regulated by trade agreements, such as the North American Free Trade Agreement (NAFTA) and the General Agreements on Tariffs and Trade (GATT), remains unresolved. The IJC has expressed its belief that water in its natural form is not a *good* for purposes of trade agreements, and therefore, is not subject to trade agreement obligations.⁴⁷

Assuming water in its natural form is not a good, it has been suggested that a nation may exploit or conserve its water domestically as its sovereign right.⁴⁸ But, once water is removed from its natural state and enters into commerce as a saleable commodity, then it may become a good subject to trade agreement obligations. Article XI of the GATT prohibits parties from placing quantitative restrictions on imports and exports.⁴⁹ Article XX of the GATT, however, creates specific exceptions to the entire Agreement to aid public policy.⁵⁰ As long as there is no “arbitrary or unjustifiable discrimination between countries where the same conditions prevail,” or a “disguised restriction on international trade,” a contracting party may adopt GATT-inconsistent measures “(b) necessary to protect human, animal or plant life or health” (health exception); or “(g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption” (conservation exception).

The new common conservation themes in the Compact and Agreement are designed, in part, to address concerns that the current legal framework and institutions governing Great Lakes water diversions are vulnerable to challenge under these trade agreements. A common conservation theme, according to some, would help the United States—should it be challenged for improperly interfering with water exports—to invoke the “health” or “conservation” exceptions to GATT and NAFTA obligations.⁵¹ Some question whether these exceptions even apply to water.⁵² Others have argued that it is extremely unlikely that a country outside of North America would institute a GATT challenge and that the more likely challenge could come from foreign investors under

⁴⁶ Prepared with the assistance of Jeanne J. Grimmett, Legislative Attorney, American Law Division.

⁴⁷ IJC Report 2000 Report, at 28.

⁴⁸ *Id.* at 29.

⁴⁹ GATT Art. XI is incorporated into the NAFTA in Art. 309.

⁵⁰ GATT Art. XX is incorporated into the NAFTA in Art. 2101.1.

⁵¹ IJC 2000 Report, at 28.

⁵² IJC 2000 Report, at 52.

NAFTA investment rules and the requirement for National Treatment.⁵³ Some interest groups claim that the exceptions for straddling communities and counties may also make the agreements more susceptible to NAFTA challenges.⁵⁴

Industry

Some have voiced concern over the “bulk water transfer” (also called the “bottled water”) provisions in the Compact and Agreement that would exempt certain withdrawals in containers less than 5.7 gallons from regulation under the Compact. Instead, the provision allows each party to determine the treatment of proposals for withdrawals and out-of-basin transfers of water in containers less than 5.7 gallons.⁵⁵ It has been argued that the Compact and Agreement would allow bottling companies and others unlimited access to withdraw and ship Great Lakes water outside the Basin, provided they use containers that are 5.7 gallons or smaller.⁵⁶ Critics argue that the apparent loophole will open the door to more bulk water withdrawals and challenges under NAFTA because it allows Great Lakes water to be treated as a product or commodity.⁵⁷ Bottled water companies contend that their withdrawals in the Great Lakes region are not unprecedented and would still have to comply with state and other federal laws.⁵⁸ Pro-business interests have claimed that the exception will fuel an industry that can provide needed jobs and development.⁵⁹

Environment

Many are concerned with the potential environmental impacts of removing water from the Great Lakes and see the many exceptions to the general ban on diversions as problematic.⁶⁰ Relatedly, others contend that the Standard does not adequately protect the environment. Some suggest, for example, that the cumulative impact terminology is an ineffective way to decide when to stop a water project because it is vague and will be assessed only every five years.⁶¹ On the other hand, others argue that consistent Basin-wide standards will lead to effective water management, and

⁵³ Steven Shrybman, Legal Opinion: Great Lakes Basin Sustainable Water Resources Compact and the Diversion of Great Lakes Waters at 8-11, Commissioned by the Council of Canadians, National Water Campaign (October 2004) available at http://www.canadians.org/water/documents/legalop_greatlakes_14oct04.pdf, last visited on December 28, 2006 [hereinafter Shrybman Legal Opinion]. National Treatment requires each party to “accord to investors of another party treatment no less favorable than that it accords, in like circumstances, to its own investors.” Shrybman argues that the return flow requirement in the Standard may be challenged because it, in effect, discriminates against out-of-basin users—that is, it would be more difficult for users located far from the Basin to return water.

⁵⁴ Press Release, The Council of Canadians, *Great Lakes remain unprotected under new agreement* (June 30, 2005), available at <http://www.canadians.org/media/water/2005/30-June-05.html> last visited on December 28, 2006.

⁵⁵ See §4.12.10 in the Compact and Article 207(9) of the Agreement.

⁵⁶ U.S. Representative Dennis Kucinich, “Protecting the Great Lakes, From Annex and Overuse,” *Waterkeeper Magazine* (Spring 2006), pgs. 72-75; John Flesher, Associated Press, *Attorney warns of dangers in water protection plan*, (December 24, 2005) available at http://www.greatlakesdirectory.org/oh/122505_great_lakes.htm, last visited on December 28, 2006. Tony Clarke, Polaris Institute, *Great Lakes Water Bottling: Who’s Counting?* (November 8, 2006) available at http://www.polarisinstitute.org/polaris_institute_water_alert last visited on December 28, 2006.

⁵⁷ *Id.*

⁵⁸ John Flesher, Associated Press, *Attorney warns of dangers in water protection plan*, (December 24, 2005).

⁵⁹ Martin DeAgostino, SouthBendTribune.com, *Indiana slowly ponders Great Lakes pact*, (August 21, 2006).

⁶⁰ See Press Release, The Council of Canadians, *Great Lakes remain unprotected under new agreement*, (June 30, 2005).

⁶¹ Ralph Pentland, *Great Lakes Compact—Water for Sale?*, Woodrow Wilson International Center for Scholars (September 2004) available at <http://wwics.si.edu/events/docs/ACF186.pdf> last visited on December 28, 2006.

provisions that lower cumulative adverse impacts will help improve the environment.⁶² Critics also contend that the Compact would substantially increase the likelihood of long-term, low-volume water diversions from the Great Lakes because it imposes *no* limits on the *total* volume of water that may be removed or the duration of such withdrawals.⁶³ Others counter by saying that environmental limits to water withdrawals have not been studied and that determining how much water is too much to remove from the Great Lakes should be an adaptive process based on monitoring and periodic evaluations. The Compact addresses this issue indirectly by stating that no proposal will comply with the Standard if it results in significant individual or cumulative adverse impacts to the quality and quantity of the natural resources of the Basin. Further, the impacts of water level decreases are tempered by a provision in the Standard that requires water withdrawn to be returned to the source watershed less an allowance for consumptive use.

Legal

Although many of the legal concerns raised in earlier drafts were addressed by the final Compact, some questions remain. For example, there appears to be some ambiguity related to the Compact's potential effect on the governor's veto authority under WRDA 1986 (as amended). Currently, each Great Lakes state retains the power to unilaterally veto and essentially prevent the diversion or export of Great Lakes water outside the Basin. The Compact does not indicate what its effect would be on WRDA, which may complicate a court's interpretation of the related yet fundamentally different provisions. Some might argue that approval of the Compact would implicitly repeal the governors' veto power.⁶⁴ Congress may also explicitly repeal the WRDA veto authority. Upon approval of the Compact, it obtained the force of law. Under the U.S. Constitution, states generally cannot act where Congress has spoken or discriminate against interstate commerce.⁶⁵ This may lead some to question the validity of state regulation of water withdrawals that is emphasized in the Compact. Now that the Compact has been approved, states are still authorized to exercise their traditional authority for water management. The states are required to meet a baseline standard created by the Compact, but are able to implement stricter standards at their discretion.

The Role of Congress

In WRDA 2000, Congress encouraged the Great Lakes states, in consultation with the provinces of Ontario and Quebec, to develop and implement a common conservation standard for making decisions concerning the withdrawal and use of water from the Great Lakes Basin. This ultimately resulted in the formulation of the Compact and Agreement. Although Congress may play some role in overseeing the international provincial-state Agreement, its legally non-binding nature under international law would appear to limit Congress's direct role. On the other hand, the Compact has achieved full force and effect after the Great Lakes states approved it and

⁶² See Press Release, The Nature Conservancy, *The Nature Conservancy Applauds Commitment by States and Provinces to Protect and Improve the Great Lakes Ecosystem* (December 25, 2005).

⁶³ Shrybman Legal Opinion, at 5.

⁶⁴ Courts, however, are reluctant to accept repeal by implication and will generally attempt to read the two conflicting statutes so as to give effect to both, unless it is clear from the text or legislative history from the latter statute that Congress intended to repeal the earlier one and simply failed to do so expressly. 1A NORMAN J. SINGER, *STATUTES AND STATUTORY CONSTRUCTION*, §23.9 at 462 (6th ed. 2000).

⁶⁵ U.S. CONST. art. VI, cl. 2 (Supremacy Clause); U.S. CONST. art. I, §8, cl. 3 (Commerce Clause).

Congress consented to it. The following paragraphs outline some of the basic legal concepts for compacts, including the procedures for congressional consent.

Authorization for interstate cooperation by means of a compact is found in article I, section 10, clause 3 (the “Compact Clause”) of the Constitution, which provides that “no State shall, without the Consent of Congress ... enter into any Agreement or Compact with another State or with a foreign Power....” Interstate compacts come into existence when (1) the legislatures of the member states authorize identical compact language and (2) Congress consents, if necessary. An interstate compact will be transformed into federal law when it has the express consent of Congress and is a subject matter of appropriate congressional legislation.⁶⁶ Compacts are also basically contracts between states, and a violation of compact terms will generally result in a breach of contract between states. The U.S. Supreme Court is the usual forum for resolving disputes between the member states of a compact.⁶⁷ As both a contract and a statute, an interstate compact has the force and effect of statutory law, and once enacted, cannot be unilaterally renounced or amended by a member state except as provided by the compact itself or by mutual consent of the members by adopting identical substantive language.⁶⁸

For purposes of the Compact Clause, congressional consent is necessary for a compact if it “tends to increase the political power in the states, which might encroach upon or interfere with the just supremacy of the United States.”⁶⁹ While states have some legal right to restrict the use of water out of concern for the health, safety, and welfare of their citizens,⁷⁰ the federal interest in the Great Lakes is clear under the Commerce Clause,⁷¹ as well as under the sovereign authority of the United States to conduct foreign relations. Indeed, the Great Lakes are a multi-state resource, an interstate body of navigable water,⁷² and a pathway of international commerce. Due to these significant federal interests, a compact that regulates the export or diversion of Great Lakes water would necessarily require the consent of Congress.

The Constitution provides neither the means nor the timing of the required consent. Generally, congressional consent takes the form of a joint resolution that sets forth and approves the text of the compact and adds any provision deemed necessary to protect a national interest.⁷³ Consent usually is granted to a specific compact already adopted by several of the member states, or Congress may grant advance consent by authorizing all compacts which subsequently may be established in a particular field.⁷⁴ In addition to expressing consent (e.g., joint resolution),

⁶⁶ *New York v. Hill*, 528 U.S. 110, 111 (2000).

⁶⁷ U.S. CONST. Art. III, §2.

⁶⁸ Paul T. Hardy and Carl Vinson, INST. OF GOV'T, UNIV. OF GEORGIA, *Interstate Compacts: The Ties that Bind* 3 (1982) [hereinafter *The Ties that Bind*].

⁶⁹ *Virginia v. Tennessee*, 148 U.S. 503 (1893).

⁷⁰ Brian D. Anderson, *Selling Great Lakes Water to a Thirsty World: Legal, Policy & Trade Considerations*, 6 BUFF. ENVTL. L. J. 215, 229 (1999). *See, e.g.*, WIS. STAT. §30.21(1) (2002) (regulating the use of Great Lakes water by public utilities).

⁷¹ U.S. CONST. Art. I, §8, cl.2. Congress shall have the Power to “regulate Commerce with foreign Nations and among the several States....” *Id.* Commerce clause authority extends to water navigable in interstate or foreign commerce. *See The Daniel Ball*, 77 U.S. 557, 566 (1870). *See also Sporhase v. Nebraska*, 458 U.S. 941 (1982) (groundwater found to be an article of interstate commerce). Classifying water as an article of interstate commerce for Commerce Clause purposes does not necessarily mean it qualifies as a “good” for trade agreement purposes.

⁷² *Sanitary Dist. of Chicago v. United States*, 266 U.S. 405, 426 (1924) (finding that a riparian state cannot authorize diversions of water from the Great Lakes that will affect lake levels, without the consent of Congress, since withdrawals that affect lake levels may also impair navigation).

⁷³ *The Ties that Bind*, at 17.

⁷⁴ *Id.*

Congress may also implicitly consent when it “adopts the particular act by sanctioning its objectives and aiding in enforcing them.”⁷⁵ Congress may also give conditional consent, whereby conditions must be met or changes made before the compact becomes operational. For example, Congress may place limitations on its consent, which can include imposing time constraints, requiring renewed consent, restricting operation to specified functions, or requiring disclosures of information.⁷⁶ In the case of the Great Lakes Compact, Congress enacted the legislation without substantive changes, and included no conditions or limitations.

Conclusion

As the largest single supply of surface freshwater in the world, the Great Lakes support a vast web of domestic and international interests. Potential threats to the Great Lakes water levels, particularly possible increases in domestic and international demand, have many in the United States and Canada reexamining the laws and policies that currently regulate water withdrawals from the lakes. The Agreement and Compact are the most recent products of these reexaminations and seem to be consistent with the views expressed by Congress in WRDA 2000 to create a new conservation-based decision-making standard for withdrawals from the Basin.

⁷⁵ *Id.* In *Virginia v. Tennessee*, (case concerned a dispute over state boundaries described in a compact), consent was implied from the fact that Congress had established judicial districts in recognition of the boundary established by the compact.

⁷⁶ *The Ties that Bind*, at 18-19.

Appendix. Standard of Review and Decision Under the Compact

Table A-I. Comparison of the Standard for Withdrawals and Consumptive Use and the Exception Standard for Diversions

Standard for Withdrawals and Consumptive Use	Exception Standard for Diversions (straddling communities, intra-Basin transfers, and straddling counties)
<p>No comparable provision.</p> <p>The proposed use is reasonable, based on consideration of the following:</p> <ul style="list-style-type: none"> a. Whether the proposed is planned in a fashion that provides for efficient use of water, and will avoid or minimize waste of water; b. Whether efficient use is made of existing water supplies; c. The balance between economic development, social development and environmental protection of the proposal and other existing or planned water uses sharing the water source; d. The supply potential of the water source, considering quantity, quality, and reliability and safe yield of hydrologically interconnected water sources; e. The probable degree and duration of any adverse impacts caused or expected to be caused under foreseeable conditions to other uses of water or to the quantity or quality of the waters and water dependent natural resources of the Basin, and the proposed plans and arrangements for avoidance or mitigation of such impacts; and f. If a Proposal includes restoration of hydrologic conditions and functions of the Source Watershed. <p>All water taken is returned to the same Great Lake watershed it was taken from, less an allowance for consumptive use.</p>	<p>The need for all or part of the water cannot be avoided through the efficient use and conservation of existing water supplies;</p> <p>The amount of water taken is limited to what is reasonable;</p> <p>All water withdrawn is returned to the same Great Lake watershed it was taken from, less an allowance for consumptive use. No surface water or groundwater from outside the basin may form any portion of the return flow</p> <p>unless it: (1) is a part of a co-mingled public water supply or wastewater system; and (2) is treated to prevent invasive species and to meet water quality discharge standards;</p>

Standard for Withdrawals and Consumptive Use	Exception Standard for Diversions (<i>straddling communities, intra-Basin transfers, and straddling counties</i>)
There will be no significant individual or cumulative adverse impacts to the quantity or quality of the waters and water dependent natural resources and applicable source watershed.	There will be no significant individual or cumulative adverse impacts to the quantity or quality of the waters and water dependent natural resource of the Basin with consideration of cumulative impacts of any precedent-setting consequences;
Environmentally sound and economically feasible water conservation measures will be implemented;	Environmentally sound and economically feasible water conservation measures will be implemented to minimize water withdrawal or consumptive use;
All applicable municipal, state, and federal laws as well as regional interstate and international agreements, including the Boundary Waters Treaty, shall be met;	All applicable municipal, state, and federal laws as well as regional interstate and international agreements, including the Boundary Waters Treaty, shall be met; and
No comparable provision.	All additional criteria listed in §4.9 of the Compact.

Note: This table is adapted from Ontario, Ministry of Natural Resources, Great Lakes, and St. Lawrence Basin Waters, available at <http://www.mnr.gov.on.ca/200063.pdf>.

Author Information

Pervaze A. Sheikh
Specialist in Natural Resources Policy

Cynthia Brougher
Legislative Attorney

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